

## **REMARKS/ARGUMENTS**

The Applicants have carefully considered this application in connection with the Examiner's Action and respectfully request reconsideration of this application in view of the foregoing amendment and the following remarks.

Presently, the Applicants have amended Claims 41 and 58, and canceled Claims 42 and 59 without prejudice or disclaimer. No other claims have been amended, canceled nor added. Accordingly, Claims 41, 43-50, 52-53, 55-58, 60-67, 69 and 70 are currently pending in the application.

### **I. Double Patenting**

The Examiner has indicated that Claims 41 and 58 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 2 of U.S. Patent No. 6,333,508 (the '508 Patent). The Examiner has indicated that while the conflicting claims are not identical, they are not patentably distinct from each other. The Applicants disagree with the Examiner's nonstatutory obviousness-type double patenting rejection of the pending case; however, the Applicants have amended previous Claims 41 and 58 to include the elements of previous Claims 42 and 59.

Accordingly, the Applicants request the Examiner to withdraw the nonstatutory obviousness-type double patenting rejection to Claims 41 and 58.

### **II. Rejection of Claims 41-43, 47-48, 52-53, 56, 59-60, 64-65, 67, and 69-70 under 35 U.S.C. §102**

The Examiner has rejected Claims 41-43, 47-48, 52-53, 56, 59-60, 64-65, 67, and 69-70 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,852,633 to Hunter ("Hunter"). Independent claims 41 and 58, in one form or another, include the element of at least one electron beam splitting lens array placed in a drift space in an electron gun assembly for splitting the electron beam into a plurality of sub beams. Hunter fails to disclose such an element.

For example, in direct contrast to the present invention, Hunter teaches a control grid **12**. However, the control grid **12** of Hunter, at the very most, is an electron beam combining lens array that is configured to converge beamlets into a unitary beam after passage there through. (See, Hunter at column 4, lines 35-42). Thus, wherein the present invention claims at least one electron beam splitting lens array for splitting electron beams, Hunter discloses the control grid **12** that converges multiple electron beams. Therefore, Hunter fails to teach the aforementioned element.

Therefore, Hunter does not disclose each and every element of the claimed invention and as such, is not an anticipating reference. Because Claims 42-43, 47-48, 52-53, 56, 59-60, 64-65, 67, and 69-70 are dependent upon Claims 41 and 58, Hunter also cannot be an anticipating reference for Claims 42-43, 47-48, 52-53, 56, 59-60, 64-65, 67, and 69-70. Accordingly, the Applicants respectfully request the Examiner to withdraw the §102 rejection with respect to these Claims.

### **III. Rejection of Claims 44-46 and 61-63 under 35 U.S.C. §103**

The Examiner has rejected Claims 44-46 and 61-63 under 35 U.S.C. §103(a) as being unpatentable over Hunter in view of U.S. Patent No. 3,886,398 to Feinstein ("Feinstein"). As previously indicated, independent Claims 41 and 58, in one form or another, include the element of at least one electron beam splitting lens array placed in a drift space for splitting the electron beam

into a plurality of sub beams. As was previously established, Hunter fails to disclose such an element. Hunter further fails to suggest such an element. Hunter fails to suggest such an element because Hunter's control grid **12** converges the beamlets, as opposed to splits the electron beam into a plurality of sub beams, as is currently claimed. Therefore, Hunter actually teaches away from an electron beam splitting lens array, as is currently claimed, which is clearly not a suggestion.

Feinstein fails to correct the deficiencies of Hunter. The Examiner is offering Feinstein for the sole proposition that the electron gun assembly has a cathode, and further that a linear tube may house the electron gun and is further coupled in a vacuum tight fashion to a drift tube. Without even addressing whether Feinstein does in fact teach or suggest these elements, a teaching or suggestion that the electron gun assembly has a cathode, and further that a linear tube may house the electron gun and is further coupled in a vacuum tight fashion to a drift tube, is very different from a teaching or suggestion of at least one electron beam splitting lens array placed in a drift space for splitting the electron beam into a plurality of sub beams, as is presently included within independent Claims 41 and 58. Accordingly, Feinstein also fails to teach or suggest this element.

Thus, Hunter, individually or in combination with Feinstein, fails to teach or suggest the invention recited in independent Claims 41 and 58 and their dependent claims, when considered as a whole. The combination must also fail to establish a prima facie case of obviousness with respect to these claims. Claims 44-46 and 61-63 are therefore not obvious in view of the combination.

In view of the foregoing remarks, the cited references do not support the Examiner's rejection of Claims 44-46 and 61-63 under 35 U.S.C. §103(a). The Applicants therefore respectfully request the Examiner withdraw the rejection.

#### **IV. Rejection of Claims 49, 57 and 66 under 35 U.S.C. §103**

The Examiner has rejected Claims 49, 57 and 66 under 35 U.S.C. §103(a) as being unpatentable over Hunter in view of U.S. Patent No. 5,932,972 to Symons ("Symons"). As previously indicated, independent Claims 41 and 58, in one form or another, include the element of at least one electron beam splitting lens array placed in a drift space for splitting the electron beam into a plurality of sub beams. As was previously established, Hunter fails to disclose or suggest such an element.

Symons fails to correct the deficiencies of Hunter. The Examiner is offering Symons for the sole proposition of a third grid electrode. Without even addressing whether Symons does in fact teach or suggest these elements, a teaching or suggestion of a third grid electrode is very different from a teaching or suggestion of at least one electron beam splitting lens array placed in a drift space for splitting the electron beam into a plurality of sub beams, as is presently included within independent Claims 41 and 58. Accordingly, Symons also fails to teach or suggest this element.

Thus, Hunter, individually or in combination with Symons, fails to teach or suggest the invention recited in independent Claims 41 and 58 and their dependent claims, when considered as a whole. The combination must also fail to establish a prima facie case of obviousness with respect to these claims. Claims 49, 57 and 66 are therefore not obvious in view of the combination.

In view of the foregoing remarks, the cited references do not support the Examiner's rejection of Claims 49, 57 and 66 under 35 U.S.C. §103(a). The Applicants therefore respectfully request the Examiner withdraw the rejection.

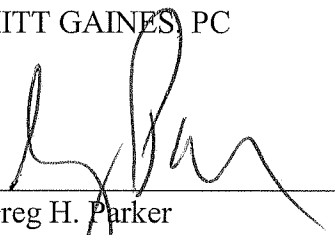
**V. Conclusion**

In view of the foregoing amendment and remarks, the Applicants now see all of the Claims currently pending in this application to be in condition for allowance and therefore earnestly solicit a Notice of Allowance for Claims 41, 43-50, 52-53, 55-58, 60-67, 69 and 70.

The Applicants request the Examiner to telephone the undersigned attorney of record at (972) 480-8800 if such would further or expedite the prosecution of the present application. The Commissioner is hereby authorized to charge any fees, credits or overpayments to Deposit Account 08-2395.

Respectfully submitted,

HITT GAINES, PC

  
A handwritten signature in black ink, appearing to read 'Greg H. Parker', is written over a horizontal line.

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